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## Health Risk Assessment of 1,3-Butadiene

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National Center for Environmental Assessment  
Office of Research and Development  
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## PREFACE

This Health Risk Assessment of 1,3-Butadiene has been prepared to serve as a source document for Agencywide use. This document was developed primarily for use by the U.S. Environmental Protection Agency's (EPA) Office of Mobile Sources (OMS) to support decision making regarding the Air Toxic Rule's Section 202L2 of the Clean Air Act Amendment. Since OMS requested that this assessment focus on mutagenicity, carcinogenicity, and reproductive/developmental effects, an evaluation of other health hazards has not been included. This document, therefore, is not a comprehensive health assessment. The exposure information included here is an overview of the ambient exposures and exposure to populations adjacent to emission sources, without any actual exposure assessment as such.

In the development of this assessment, relevant scientific literature has been incorporated from the period July 1, 1985, through January 31, 1997. Key studies have been evaluated to qualitatively describe the mutagenicity, reproductive/developmental effects, and carcinogenicity of 1,3-butadiene. The assessment also includes a summary, conclusions, and risk characterization. Measures of dose-risk relationships relevant to ambient air exposures are discussed so that the adverse health effects can be placed in perspective with possible exposure levels.

## AUTHORS, CONTRIBUTORS, AND REVIEWERS

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